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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,963	02/07/2002	Yoshio Saito	02072/LH	1518

1933 7590 04/21/2005

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EXAMINER

DICUS, TAMRA

ART UNIT PAPER NUMBER

1774

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/071,963

Applicant(s)

SAITO ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

The prior 112 2nd rejection is withdrawn due to Applicant's amendments.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 14-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 14-16 are unclear, particularly the description of a transparent layer "attaches or attached the adhesive layer of the hard coating film" and in claim 16, the recitation of "the hard coating film attaches the adhesive layer of the transfer foil". Such language is confusing. The Examiner suggests claiming the layers in order to avoid confusion.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, and 11-13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 875 374 A2 to Shimizu in view of USPN 5,656,359 to Hirota et al. as previously set forth in the Office Action mailed 11/02/2004.

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To the new limitations of a resin obtained by copolymerization of a dicarboxylic acid component consisting of terephthalic acid and a diol component consisting of 1,4-cyclohexanedimethanol and ethylene glycol, Shimizu teaches at page 3, lines 46-55.

Claim 17 (new) is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 875 374 A2 to Shimizu in view of USPN 5,656,359 to Hirota et al.

Shimizu teaches a decorative laminated sheet comprising a layer of completely amorphous polyester type resin (includes 100% amorphous polyester, meeting instant claim 6) and a substrate layer of amorphous polyethylene terephthalate (APET) see Example 1, page 3, lines 35-55, page 4, lines 1-20 and Abstract. Shimizu teaches an APET can be partially crystalline at page 2, lines 15-25. The thermoplastic may be colored or surface-printed at page 2, lines 22-23. This teaching is equivalent to a base material of colored APET as a main component. Shimizu teaches a transfer foil may be applied over the APET, and that the foil may also be comprised of APET (see page 2, lines 45-55). Transparent layer is provided as a protecting print layer at page 4, lines 10-15. A print layer for a design may be applied to the transfer foil, which Shimizu states can be made of the APET, thereby functioning as a suitable layer adjacent to a base material of APET, although Shimizu does not state the layering in the same manner. Further at page 4, lines 10-15, Shimizu teaches a transparent protective film for protecting the print layer and a top coat layer are known in the art and teaches applying adhesive to APET. To the limitations of a resin obtained by copolymerization of a dicarboxylic acid component consisting of terephthalic acid and a diol component consisting of 25 to 35% by mole 1,4-cyclohexanedimethanol and 65 to 75% by mole ethylene glycol, Shimizu teaches at page 3, lines 46-55, 60-80 mol% of ethylene glycol falls within Applicant's range of 65-75% and 20-40

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mol% of 1,4-cyclohexanedimethanol falls within Applicant's range of 25-35% (see especially page 3, line 53.

While Shimizu teaches polyvinyl chloride resins may be blended with APET at page 3, line 11, Shimizu does not teach the ink composition of the pattern layer. However, Hirota teaches a decorative sheet of a print layer (2) with an ink composition overlying a polyester base (1) (col. 4, line 55-54). The print layer (2) has an ink layer comprised of a binder of vinyl chloride/acetate copolymer. See col. 5, lines 1-42. The binder is used to impart heat resistance and solubility. It would have been obvious to one of ordinary skill in the art to modify the sheet of Shimizu to include the ink composition including vinyl chloride/acetate copolymers for the purpose of printing a film and imparting heat resistance and solubility as taught by Hirota at col. 5, lines 35-42.

Claim Objections

3. Claims 14-16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. Shimizu remains in the rejection because Shimizu teaches the components of the structure. Hirota is still used to teach the ink composition in the print layer.

Applicant argues the rejection over Shimizu and Hirota, alleging that Shimizu neither teach nor suggest imparting heat resistance and solubility taught by Hirota. While Hirota teach

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the specific printing ink composition imparts these functionalities, Hirota still provides the general printing function on a base film.

Applicant argues Shimizu nor Hirota disclose technical concept of bonding a substrate layer and another layer with ink of vinyl chloride/acetate copolymer. Shimizu provides the essential structure including a pattern layer, Hirota was simply used to teach said ink copolymer printed over polymer film.

Applicant argues Shimizu does not teach the printing ink has an adhesive property. The same copolymer is taught by Hirota as a printing ink and thus must have an adhesive property.

Applicant argues that Hirota teaches a grain pattern and built-up printed portion and because Hirota teaches the print is cured, an adhesion property is not disclosed. Again, Hirota teaches the same ink composition, prior to being cured, and inherently has the adhesion property.

Applicant argues that Hirota do not teach or suggest significant advantages of the adhesive property of the vinyl chloride/acetate copolymer and would be unfavorable because separation would not occur. However, the same materials are provided by Hirota, one having ordinary skill in the art would expect the copolymer to function the same, despite Hirota not teaching the same advantages of Applicant. Applicant has not provided objective evidence to prove that Hirota would not work in combination with Shimizu.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

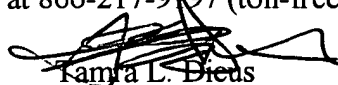
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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

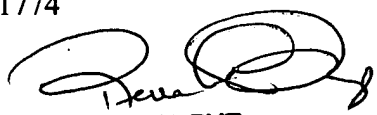
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tamra L. Dicus
Examiner
Art Unit 1774

April 13, 2005


RENA DYE
SUPERVISORY PATENT EXAMINER 4/13/05
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